Oct. 13, 1953 L. CARETTO 2,655,288

DISPENSER FOR CONDIMENTS OR THE LIKE

Filed Dec. 21, 1951

Fig. 1.

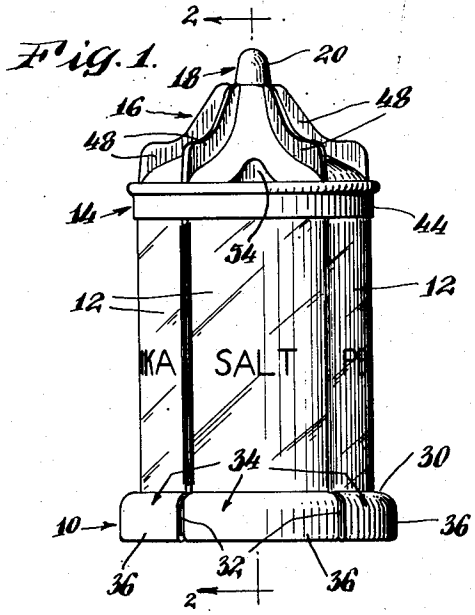


Fig. 2.

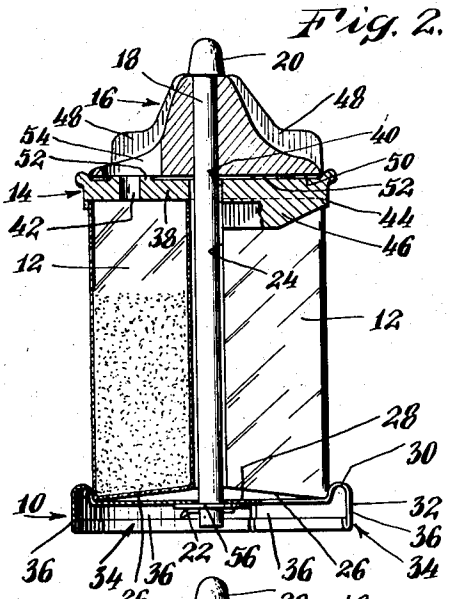


Fig. 3.

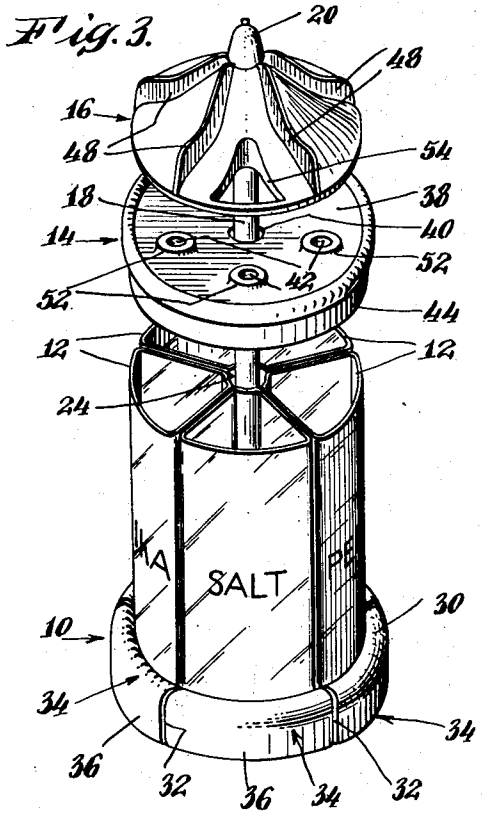
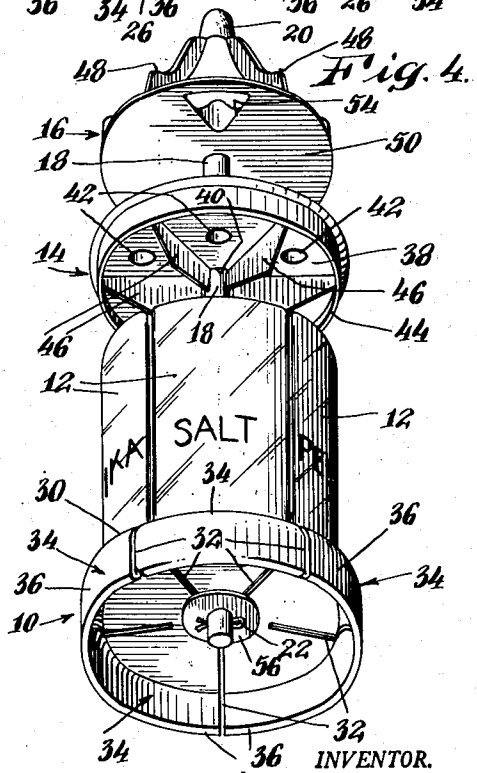


Fig. 4.



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DISPENSER FOR CONDIMENTS OR THE LIKE

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7 Claims. (Cl. 222—142.3)

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The present invention relates to dispensers for condiments or the like such as are adapted for holding a plurality of different condiments effectively isolated from one another within the device. It is an improvement in certain respects over a device heretofore developed by me for similar purposes and disclosed in my United States Patent No. 2,302,186, dated November 17, 1942.

My prior device is entirely suitable for use in certain circumstances in which the cost of the device may be a secondary factor but, where cost is a primary factor, the improvements constituting the present invention result in a dispenser which is very easy to manipulate and inexpensive to produce.

An important object of this invention is the provision of such a dispenser which has very few parts, is easy to assemble and, hence, is inexpensive to produce.

Another object is the provision of such a dispenser in which each of several separate containers for different condiments may be removed easily for refilling, without disturbing any of the other containers, and may then be easily replaced in the device.

The foregoing and other objects are accomplished by the present invention, one embodiment of which is shown, for illustrative purposes, in the accompanying drawing in which:

Figure 1 is a side elevational view of a preferred embodiment of the invention.

Fig. 2 is a vertical sectional view, substantially on the line 2—2 of Fig. 1.

Fig. 3 is a perspective, partially exploded, view of the said preferred embodiment as seen from above.

Fig. 4 is a perspective, partially exploded, view of the said preferred embodiment as seen from below.

The device illustrated in the drawing comprises, generally, a more or less flat, circular base 10, a circumferential series of upright, segmental, open-top condiment containers 12 resting upon said base, a circular container cap 14 resting upon the upper ends of all said containers and substantially closing the latter, a manually rotatable shutter 16 disposed upon said cap, and a central rod 18 which extends vertically of the device and has a head 20 at its upper end and a cotter pin 22 extending through it at its lower end to enable it to hold all the enumerated parts together.

The illustrated device, as may be seen from Fig. 3, has five similar containers 12 which, ad-

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vantageously, may be formed of thin and preferably transparent plastic material, each being segmental in shape in a horizontal plane and slightly truncated along its inner vertical edge to provide a central vertical space 24 through which the rod 18 extends. The outer, visible faces of the containers 12 may be provided with suitable label holders (not shown), or each container may have a legend or name stamped or otherwise applied thereto to identify its contents. Thus, for example, the five containers may be separately stamped "Salt," "Pepper," "Paprika," "Curry," "Garlic," or with other content-identifying legends. The top of each container is open and defined by the edges of the container's side walls, and the said edges of all the containers extend in a corresponding horizontal plane. Each container is closed at its lower end by a bottom 26 which, preferably, slopes downwardly and outwardly for ease in removal and reinsertion of the individual containers as hereinafter explained. The device, of course, can be made with more or less than five containers 12.

The containers 12, when associated in rosette form, as best seen in Fig. 3, are slightly spaced apart and rest upon the base 10 and, more particularly, within a circular depression 28 formed in said base and defined by a circumferential, regularly interrupted, ridge 30 formed in said base. The base is in the nature of a circular finger spring and may be cut from a flat blank of suitable sheet metal, shaped in any appropriate manner as, for example, by pressing, to its shape as shown in the drawing. Then it may be cut at five radial slits 32 to form five segmental spring fingers 34; the slits 32, preferably, terminating at blunt or curved surfaces at their inner ends to prevent tearing thereat. The outer ends of the fingers 34 are similarly bent downwardly to form skirts 36, all of which terminate in lower edges which extend in a common horizontal plane and constitute supporting feet for the device. After the sheet-metal base has been formed, as described, it may be suitably tempered to give its fingers 34 the resiliency enabling the device to function and to be manipulated as hereinafter described.

The circular container cap 14 may advantageously be molded of plastic material which, while fairly rigid except when formed in thin sections, is sufficiently soft to function as a gasket with the top edges of the containers 12 and with the bottom face of the shutter 16. The said cap, thus, may be molded into the general shape of a

circular disk having a flat body 38 which is thick enough to be quite rigid. It is formed with a central aperture 40 through which the rod 18 extends and five (or as many in number as there are containers 12) discharge apertures 42 in circular arrangement in radial alignment with underlying containers 12. The cap 14 has an integral depending peripheral flange 44 which holds the containers against radially outward dislodgment and integral depending radial flanges 46, disposed between the apertures 42 and extending between adjacent upper portions of the several containers to keep the latter always in circumferential alignment with the several said discharge apertures. The softness of the cap 14 enables the under surface of its body 38 to sealingly engage the upper edges of the several containers 12 to prevent escape of the contents thereof otherwise than through the apertures 42.

The shutter 16 may be molded of plastic material which, after molding, is substantially rigid, or it may be cast or otherwise formed of suitable metal. While it may be formed in innumerable shapes, it is shown in the drawing as being in the form of a modified cone having a series of integral, upwardly extending, radial flanges 48 which function as finger-pieces to facilitate manual rotation of the shutter. The bottom of the shutter has a flat surface 50 which seats slidably over the apertures 42 in the cap to prevent unintended discharge of the containers' contents through said apertures. To enhance this sealing coaction, the upper marginal edges defining the apertures 42 are slightly raised as at 52, above the general top surface of the cap 14. The shutter 16 is formed with an aperture 54, which, by manual rotation of the shutter, may be brought into discharging registry selectively with any of the discharge apertures 42, so that the user may use any one of the condiments in the device without escape of any of the other condiments. The aperture 54 is at least as large as the apertures 42 and, by slight rotation relatively to one of the latter, may afford a variety of sizes of openings for discharge of a condiment from the device. The aperture 54, of course, should be small enough to enable the shutter to provide complete closing of all apertures 42 simultaneously when the aperture 54 is not in registering position relatively to any one of the apertures 42.

A washer 56, preferably, is disposed upon the rod 18 between the base 10 and the cotter pin 22, and the length of said rod relatively to the several parts through which it extends is such that, when the device is assembled, the containers 12 are held firmly between the cap 14 and the base 10 and so that the shutter 16 is in very firm but, nevertheless, slidable engagement with said cap. This firm association of the several parts ordinarily is sufficient to assure that when the device is properly assembled with each of the spring fingers 34 in registry with a coinciding one of the containers 12, such relationship of the containers 12 and the spring fingers 34 of the base will be maintained. If desired, however, more positive means may be provided to assure the maintenance of such registering relationship between the containers and the spring fingers, as, for example, by providing the containers and spring fingers with complementally shaped, interengaging and interlocking parts, or by utilizing a rod which is square in cross-section or of other non-circular cross-sectional shape and providing that the apertures in the cap 14 and the base 10 be of complemental, non-circular shape.

In using the device, one merely turns the shutter 16 so that its aperture 54 is in registry with the aperture 42 of the particular container 12 which holds the condiment desired to be used, and then inverts and shakes the device as is customarily done with a conventional salt-shaker. In thus using the device, the two mentioned apertures may either be brought into full or perfect registry to derive the greatest possible rate of discharge of the selected condiment from the device, or, if a lesser rate of discharge is desired, the shutter may be adjusted so that the two mentioned apertures are only in partial registry to derive rates of discharge which are more or less proportional to the degree of registry of the two said apertures.

Although the device is very convenient to use, as above described, it, nevertheless, possesses another convenience which bears more directly upon the present inventive concept. This other convenience resides in the facility with which any one of the containers 12 may be removed for refilling and may then be reinserted in place in the device. This facility for convenient refilling flows from the described base 10 and the manner of its coaction with the containers 12. In order to remove a container in which the condiment supply is low or completely exhausted, the user, holding the device in one hand by grasping an upper portion of the device, may place his middle finger underneath the base and approximately at the center thereof and may then, with his thumb, press downwardly the spring finger 34 which immediately underlies the container to be removed. When the said spring finger has been pressed downwardly to a sufficient extent to bring the ridge portion 30 thereof below the level of the lower outer edge of the container to be removed, and while the spring finger is held in its said downward position, the device as a whole may be tilted toward the user so that the container to be removed will have a tendency to fall radially outwardly, and this motion may be aided by manipulation of said container with the index finger of the same hand. As only one of the spring fingers is thus manipulated, only one container at a time can be removed from the device by the described operation.

After the supply of the condiment in the mentioned container has been replenished, a substantially reverse operation is followed to replace the container in the device. Thus, the upper open end of the refilled container may be pushed into place behind the flange 44 of the cap and between the cap's radial flanges 46 and then pushed upwardly as far as it will go. At this stage, the lower end of the container is outside of the base, but the spring finger 34 related to said container may then be pressed downwardly with the thumb of the user's one hand, and the bottom of the container may then be pushed radially into place and the spring finger 34 released to hold the container against accidental dislodgment. The fact that the bottom 26 of the container slopes upwardly and inwardly prevents the container from binding upon the top surface of the base 10 when the container is being removed and reinserted.

It may be seen from the foregoing description that the present improvements result in a greatly simplified device, which can be economically produced and one which is extremely easy to manipulate for the purpose of replenishing the exhausted or partially exhausted supply of a condiment in any one of the containers.

It should be understood that the invention may

be embodied in various structures other than the structure disclosed herein without, however, departing from the spirit of the invention as set forth in the following claims.

I claim:

1. A dispenser comprising a group of upright, radially arranged containers, discharge-controlling means associated with one end of said group, and flexible holding means associated with the other end of said group for releasably restraining said containers against lateral displacement; the said containers being incapable of material axial movement relatively to said discharge-controlling means and said holding means.

2. A dispenser comprising plural, upright, radially arranged containers, and means coacting with said containers at opposite ends thereof for restraining them against radially outward shifting; the said means at one end of said containers being yieldable selectively at separate parts thereof coinciding with each of the containers whereby to permit outward radial movement of a selected one of said containers at said one end.

3. A dispenser comprising plural, radially arranged containers having corresponding closed ends and opposite, corresponding open ends, restraining means coacting with said containers at their open ends for restraining said open ends against outward radial movement, and separate, manually releasable, resilient retainer members each coacting with a different one of said containers at the closed end thereof whereby to releasably retain said closed end against outward radial displacement.

4. A dispenser comprising plural, radially arranged containers having corresponding closed ends and opposite, corresponding open ends, a cap substantially covering the open ends of said containers and coacting with the latter to oppose outward displacement of their open ends, the said cap having separate discharge apertures communicating with the interiors of the said containers, a shutter, movable relatively to the cap and coacting therewith to selectively open a discharge aperture of any one of the containers to permit discharge of the contents thereof, and a retainer plate having radial spring fingers different ones of which are normally in yieldable retaining engagement with corresponding different ones of the containers adjacent the bottoms thereof; said fingers being manually deformable to release their related containers separately for radially outward movement.

5. A dispenser according to claim 4, wherein the said retainer plate constitutes a supporting base for the device.

6. A dispenser according to claim 4, wherein an outer marginal portion of each spring finger is deformed upwardly in the form of an abutment to prevent unintended radially outward shifting of its related container and, thence, downwardly in the form of a foot for supporting the device.

7. A dispenser comprising plural, radially arranged, substantially similar containers having open upper ends and closed lower ends, a stationary cap superposed upon the upper ends of the containers and having circularly arranged discharge apertures in aligned positions relatively to the containers, a manually rotatable shutter superposed upon the said cap and adapted to selectively open the discharge aperture of any selected one of the containers to permit discharge of the contents thereof, a base plate having radial spring fingers, underlying and in axial alignment with said containers, the said spring fingers being distortable axially of the device, and each having an abutment toward its free end adapted to normally engage the lower end of a related container to oppose radially outward shifting of the latter but being of such size as to be substantially clear of the container when the finger is distorted axially away therefrom, and a tie-rod extending centrally between the plural containers and through the said cap, shutter and base plate and coacting with the two latter to hold all said parts in the said relationship.

LOUIS CARETTO.

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